

5134206



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

D6101-017
Job Sheet 185842



Part No: D6101-017

Job Qty: 12 ea

Part Name: Saddle Billet



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 11/5/18

Job Tracking No:

Due Date: 11/26/18

Created By: Chantal Lavoie

Type: Stock

Description:

Note: DWG REV B IPP RevA: New issue DD verified by:EC

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier	Lead Time	
100	Purchasing	12 pcs		11/26/18	0.00	0.00	Purchasing		M 13/12/03
110	Packaging	12 pcs		11/26/18	0.00	0.00	Packaging2		AT18/12/03
120	QC	12 pcs		11/26/18	0.00	0.00	QC6		61
130	Packaging	12 pcs		11/26/18	0.00	0.00	Packaging3-2		DAS 21 9-89
140	QC21-SA	12 Ea		11/26/18	0.00	0.00	QC21		DEC 04 2018

Part Op 100 - Issue P/O: 41594 b) 6.350" x 6.250" x 2.250" thick (+0.030 / -0.000) d) Grain direction along 6.350"

Descriptions: length

110 - Ensure material certification is attached

120 - Ensure Material certification comply to Dwg D6101

130 - LOCATION: MAT046

NOV 05 2018

X12

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
D6101-017P	Aluminum Billet	12 pcs (1 ea)	100-Purchasing	5134186

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
100-Purchasing	D6101-017P	12	0	0

Part Specifications

Specifications could not be found.

Plex 11/5/18 7:20 AM dart.lavoie.chantal

DART
AEROSPACE
DAS-89

P/N: D6101-017

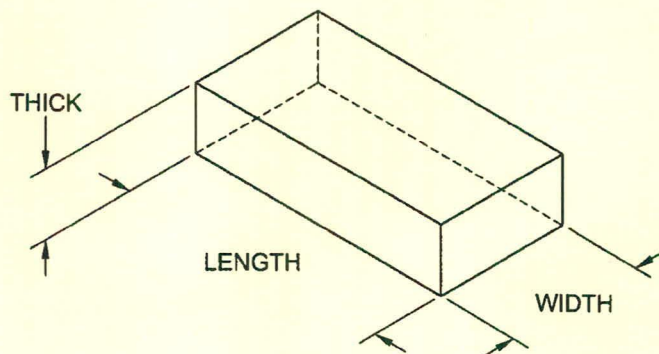
REV: B

W/O: 5134206 61

INSP/DATE: DEC 03 2018

107 29 50

SPECIFICATION CONTROL DRAWING



PURCHASE MATERIAL ACCORDING TO THE FOLLOWING TABLE. SPECIFY ALLOY, LENGTH x WIDTH x THICK (+0.030/-0.000), AND GRAIN DIRECTION AS SHOWN.

TOLERANCES ON ALL DIMENSIONS ARE +0.030/-0.000.

ALL DIMENSIONS ARE IN INCHES.

B ACCEPTABLE SPECIFICATIONS FOR 7075-T7351 ALUMINUM ARE AMS-QQ-A-250/12, QQ-A-250/12, OR ASTM B209

Part No.	Alloy	Length	Width	Thick	Grain Direction
D6101-001	7075-T7351 (QQ-A-250/12)	6.000	6.250	2.000	Along 6.000 Length
D6101-003	7075-T7351 (QQ-A-250/12)	7.875	6.250	2.000	Along 7.875 Length
D6101-005	7075-T7351 (QQ-A-250/12)	5.000	8.250	2.500	Along 5.000 Length
D6101-007	7075-T7351 (QQ-A-250/12)	7.750	8.250	2.500	Along 7.750 Length
D6101-009	7075-T7351 (QQ-A-250/12)	8.700	8.250	2.500	Along 8.700 Length
D6101-011	7075-T7351 (QQ-A-250/12)	9.700	8.250	2.500	Along 9.700 Length
D6101-013	7075-T7351 (QQ-A-250/12)	10.100	8.250	2.500	Along 10.10 Length
D6101-015	7075-T7351 (QQ-A-250/12)	9.450	6.250	2.500	Along 9.450 Length
B D6101-017	7075-T7351 (QQ-A-250/12)	6.350	6.250	2.250	Along 6.350 Length

RELEASED
09/07/15/WB

B	ADDED D6101-015/-017, ADD ASTM B209	RF	09.04.23
A	NEW ISSUE	CP	01.03.30
REV.	DESCRIPTION	BY	DATE
DESIGN	CP	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED		DRAWING NO.	
MFG. APPR.		D6101	
APPROVED		TITLE	
DE APPR.		SADDLE BILLET, 7075	
DATE	09.04.23	REV. B SHEET 1 OF 1 SCALE NTS	
COPYRIGHT © 2001 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.			



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER **PO041594**

Supplier: MEC002-VU
Metaux Castle
P.O. Box 4090 Stn A
Toronto
ON
M5W OE9 Canada

PO No: PO041594

PO Date: 11/5/18

Due Date: 11/26/18

Purchase Order
Revision:

Revision Date:

Ship-To Contact: Lavoie, Chantal
clavoie@dartaero.com



Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

Via: Ground

Pymt Terms: Net 30

Freight Terms:

Special Comments:

Items

Line Item	Job	Part	Supplier Part No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (USD)	Extended Price
1	185840	D6101-001P		7075-T7351 2X6X6.25 : Various STC's AS PER DWG D6101 REV. B SIZE: 6.00" X 6.250" X 2.00" THICK GRAIN DIRECTION ALONG 6.00" LENGHT MATERIAL: 7075-T7351 QQ-A-250/12 TOLERANCE AS PER QUOTE +.030"/-.000"	Firmed	-	11/26/18	20 pcs	0 pcs	20 pcs	\$29.57/pcs	\$591.40
2	185839	D6101-003P		7075-T7351 2X6.25X7.875 : Various STC's AS PER DWG D6101 REV. B SIZE: 7.875" X 6.250" X 2.00" THICK GRAIN DIRECTION ALONG 7.875" LENGHT MATERIAL: 7075-T7351 QQ-A-250/12 TOLERANCE AS PER QUOTE +.030"/-.000"	Firmed	-	11/26/18	20 pcs	0 pcs	20 pcs	\$38.82/pcs	\$776.40



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER PO041594

Items												
Line Item	Job	Part	Supplier Part No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (USD)	Extended Price
3	185838	D6101-005P		7075-T7351 8.25X5.0X2.5 : Various STC's AS PER DWG.D6101 REV.B SIZE: 5.00" X 8.250" X 2.50" THICK GRAIN DIRECTION ALONG 5.00" LENGHT MATERIAL: 7075-T7351 QQ-A-250/12 TOLERANCE AS PER QUOTE +.030"/-.000"	Firmed	-	11/26/18	20 pcs	0 pcs	20 pcs	\$40.54/pcs	\$810.80
4	185837	D6101-007P		7075-T7351 8.25X7.75X2.5 : Various STC's AS PER DWG D6101 REV. B MATERIAL: 7075-T7351 (QQ-A-250/12) SIZE: 7.750" X 8.250" X 2.50" THICK GRAIN DIRECTION ALONG: 7.750" LENGTH TOLERANCE AS PER QUOTE +.030"/-.000"	Firmed	-	11/26/18	40 pcs	0 pcs	40 pcs	\$61.72/pcs	\$2,468.80
5	185841	D6101-015P		Aluminum Billet : Various STC's As per Dwg D6101 Rev. B	Firmed	-	11/26/18	20 pcs	0 pcs	20 pcs	\$57.20/pcs	\$1,144.00
6	185842	D6101-017P		Aluminum Billet : Various STC's As per Dwg D6101 Rev. B	Firmed	-	11/26/18	12 pcs	0 pcs	12 pcs	\$32.64/pcs	\$391.68
7	185843	D6103-003P		Round Alum Billet : Various STC's AS PER DWG D6103 REV. B MATERIAL: 7075-T7351 AS PER QQ-A-225/9 SIZE: 3.500" X 12.500" LONG	Firmed	-	11/26/18	20 pcs	0 pcs	20 pcs	\$60.40/pcs	\$1,208.00

Plex 11/5/18 1:16 PM dart.lavoie.chantal



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER PO041594

Items												
Line Item	Job	Part	Supplier Part No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (USD)	Extended Price
8 <i>AT</i>	185844	D6104-005P		17-4 SS Roundbar 4.00"Od : Various STC's AS PER DWG D6104 REV. B MATERIAL: 17-4 PH AS PER AMS 4643 OR AISI 630 SIZE: 4.00" X 5.10" LONG	Firmed	-	11/26/18	20 pcs <i>✓</i>	0 pcs <i>20x</i>	20 pcs <i>AT 18/11/12</i>	\$54.20/pcs	\$1,084.00
											Grand Total:	\$8,475.08

Order Notes

Procurement Quality Clauses

A005 right of entry

A012 chemical and physical test report

A016 personnel qualification

A017 raw material identification (as applicable)

A026 certification of material conformance

A041 quality management system

A042 dart notification by supplier

A043 retention of quality documents

A048 counterfeit parts avoidance, detection, mitigation and disposition program

A049 supplier awareness

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Plex 11/5/18 1:16 PM dart.lavoie.chantal

**Castle Metals®**

A. M. Castle & Co.

**PACKING SLIP/
CERTIFICATE OF CONFORMANCE**

Page 1 of 1

Pack Slip No:3045046

Ship From: A. M. Castle & Co. Wichita East 3050 S Hydraulic Wichita, KS 67216		Sold To: DART AEROSPACE LTD 1270 ABERDEEN HAWKESBURY, ON K6A 1K7 CA		Ship To: DART AEROSPACE LTD 1270 ABERDEEN HAWKESBURY, ON K6A 1K7 CA		Deliver To: DART AEROSPACE LTD 1270 ABERDEEN HAWKESBURY, ON K6A 1K7 CA	
Date Shipped 28-NOV-2018	F.O.B. ORIGIN	Freight Terms Prepaid		Carrier BO-SHIP DIRECT		BOL No 3058563	Delivery No 122413165

Shipment Details	Final Destination Branch -
-------------------------	-----------------------------------

Order No 5310841	Line No 3	Item No 750704.MO	Description 2.2500.PL.7075.T7351.ALUMINUM.USH.48.5000.144.5000 CUT RECTANGLE TO 6.25 IN (+ .0310/- .0000 IN (GRAIN TO RUN ALONG 6.35")) X 6.35 IN (+ .0310/- .0000 IN (GRAIN TO RUN ALONG 6.35")) - ALUMINUM PLATE SAW SPECIFICATIONS: AMS-QQ-A-250/12
----------------------------	---------------------	-----------------------------	---

Purchase Order No 41594	Part Number YOUR ITEM NUMBER: D6101-017	Ordered Qty 12.00 PCS	Invoice Qty 12.00 PCS
-----------------------------------	---	---------------------------------	---------------------------------

Details	ALL PAPERWORK MUST FOLLOW ORDER / CUSTOMER MUST RECEIVE AT TIME OF DELIVERY ALL MATERIAL MUST HAVE IDENTIFYING MARKINGS EX:HEAT #'S Email P/s and certs to: clavole@dartaero.com END USER: DART AEROSPACE END USE: COMMERCIAL AIRCRAFT PARTS
----------------	--

Mill/Source	Heat Number	Mech ID	PCS	Width (IN)	Length (IN)	Shipped Qty (LBS)
CONSTELLIUM ROLLED PRODUCTS	9422260		7			64.3676
CONSTELLIUM ROLLED PRODUCTS	9422260		5			45.9769

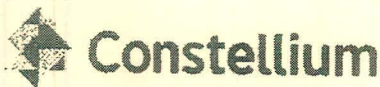
These items are controlled by the U.S. Government and authorized for export only to the country of ultimate destination for use by the ultimate consignee or end-user(s) herein identified. They may not be resold, transferred, or otherwise disposed of, to any other country or to any person other than the authorized ultimate consignee or end-user(s), either in their original form or after being incorporated into other items, without first obtaining approval from the U.S. Government or as otherwise authorized by U.S. law and regulations.

We hereby certify the material covered by this certification conforms in accordance with the above specifications and has been found to meet the applicable requirements for the material, including any specifications forming a part of the description. Test reports are on file subject to examination. All claims for defective material are waived unless made in writing to A.M. Castle & Co. within 60 days of the shipment. Material cut to the correct size, or material cut by the customer cannot be returned for credit.

Reviewed by Authorized Castle Metals Representative:

Date:

Name:



CERTIFIED TEST REPORT

Constellium Rolled Products
Ravenswood, LLC

S H I P T O	A M CASTLE CO 3050 SO HYDRAULIC WICHITA KS 67216 US	S O L D T O	A M CASTLE 1420 KENSINGTON ROAD, SUITE 220 OAK BROOK IL 60523 US
---	--	---	---

A M CASTLE		110684164	4776	INCLUSION	Serial: 20180730-0110684164	Pg 1 of 2
CUSTOMER PURCHASE ORDER NO. & ITEM 464203				Constellium ORDER NO. 243188		
ALLOY 7075	CLAD	TEMPER T7351	GAUGE 2.25000 in 57.15 mm	WIDTH 48.50000 in 1,232 mm	LENGTH 144.50000 in 3,670 mm	
ITEM ORDERED SPEC PLATE, SAWED MILL FINISH						
CUSTOMER SPECIFICATION AMS 4078J						
PART NUMBER 750704		B/L NUMBER 103669		DATE SHIPPED 07/30/2018		
WT. SHIPPED 6240.000 LB		NO. OF PIECES 000004		GOVT. CONTRACT NO.		
 Dave Dunbarger - Laboratory Manager						

CERTIFICATION
"Constellium Rolled Products, hereby certifies that metal shipped under this order has been inspected and found in conformance with the requirements of the applicable specifications as indicated herein. Any warranty is limited to that shown on Constellium Rolled Products' standard General Terms and Conditions of Sales. Test reports are on file, subject to examination."
Constellium Rolled Products Ravenswood, LLC
859 Century Road
P.O. BOX 68
RAVENSWOOD, WV 26164 USA

ALL LOTS ON THIS CERTIFICATION ALSO CONFORM TO THE FOLLOWING REQUIREMENTS:

ASTM B594 REV 13 2013 100% SONIC W/ 0.12" DEADZONE Class A
AMS QQ-A-250/12A
AMS-STD-2154C 2017 TYPE1 CLASS A 100% SONIC MINUS DEADZONE
ASTM B209-14
BSS-7055B 2013 CLASS A 100% SONIC TESTED MINUS DEADZONE
CMMP025 REV V
CST1006 REV E 2011 CLASS A 100% SONIC MINUS DEADZONE
DPS 4.713 REV AK 2012 CLASS A 100% SONIC MINUS DEADZONE
GAMPS 9101 REV B 2008 CLASS A 100% SONIC MINUS DEADZONE
MMS 159T
PS 21211P 2010 CLASS A 100% SONIC MINUS DEADZONE

Load Details

Package	Net Lbs	Kg	Lot	Piece	Serial	Parent Lot
1001843127	1,560.000	707.604	9422260	01		
1001843127	1,560.000	707.604	9422260	02		
1001843128	1,560.000	707.604	9422260	03		
1001843128	1,560.000	707.604	9422260	04		

Lot: 9422260 (See test results below)

Tensile - Room Temperature (US)

Direction	Tests	Ultimate (KSI)		Yield (KSI)		Elongation (%)		Report
		Min	Max	Min	Max	Min	Max	
LT	02	73.3	73.8	62.8	63.5	11.5	11.5	





CERTIFIED TEST REPORT
Constellium Rolled Products
Ravenswood, LLC

S
H
I
P

T
O

A M CASTLE CO
3050 SO HYDRAULIC
WICHITA KS
67216
US

S
O
L
D

T
O

A M CASTLE
1420 KENSINGTON ROAD, SUITE 220
OAK BROOK IL
60523
US

A M CASTLE 110684164 4776 INCLUSION Serial:20180730-0110684164 Pg 2of2

CUSTOMER PURCHASE ORDER NO. & ITEM
464203

Constellium ORDER NO.
243188

ALLOY	CLAD	TEMPER	GAUGE	WIDTH	LENGTH
7075		T7351	2.25000 in 57.15 mm	48.50000 in 1,232 mm	144.50000 in 3,670 mm

ITEM ORDERED
SPEC PLATE, SAWED
MILL FINISH

CUSTOMER SPECIFICATION
AMS 4078J

PART NUMBER	B/L NUMBER	DATE SHIPPED
750704	103669	07/30/2018

WT. SHIPPED	NO. OF PIECES	GOVT. CONTRACT NO.
6240.000 LB	000004	

CERTIFICATION
"Constellium Rolled Products, hereby certifies that metal shipped under this order has been inspected and found in conformance with the requirements of the applicable specifications as indicated herein. Any warranty is limited to that shown on Constellium Rolled Products' standard General Terms and Conditions of Sales. Test reports are on file, subject to examination."
Constellium Rolled Products Ravenswood, LLC
859 Century Road
P.O. BOX 68
RAVENSWOOD, WV 26164 USA

Dave Dunbarger
Dave Dunbarger - Laboratory Manager

Tensile - Room Temperature (SI)

		Ultimate (N/MM2)		Yield (N/MM2)		Elongation (%)		Report
Direction	Tests	Min	Max	Min	Max	Min	Max	
LT	02	505	509	433	438	11.5	11.5	

Conductivity % IACS MIN 39.6 MAX 40.0 % MS/M MIN 23.0 MAX 23.2

Chemistry (Actual)

	SI	FE	CU	MN	MG	CR	ZN	TI	ZR
Core	0.08	0.18	1.38	0.03	2.54	0.21	5.37	0.04	0.00

OTHERS-EACH: .05 MAX. OTHERS TOTAL: .15 MAX. AL REMAINDER

All material contained in this lot was cast and manufactured in the USA

QUALITY TEXTS:
AMC CA-154138 R 6

THIS TEST REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL, WITHOUT THE WRITTEN APPROVAL OF THE LABORATORY OR AUTHORIZED QUALITY DELEGATE. THE RECORDING OF FALSE, FICTITIOUS, OR FRAUDULENT STATEMENTS OR ENTRIES ON THE CERTIFICATE MAY BE PUNISHED AS A FELONY UNDER FEDERAL LAW.

CHEMISTRY BY OES: ARKSPARK

CHEMISTRIES REPORTED IN PERCENTAGE BY WEIGHT

WHEN FRACTURE TOUGHNESS TEST REQUIRED, TESTED PER ASTM E399

WHEN TENSILE TEST REQUIRED, TESTED PER ASTM E8; B557

DUNS Number: 090570149; CAGE Code: 1YW19

Mercury is not a normal contaminant in aluminum alloys and neither mercury nor any of its compounds were utilized in the manufacture of our product.

"END OF CERTIFICATION"



MATERIAL RECEIPT INSPECTION FORM

MATERIAL: D6101-017
DATE: 18/12/03

PO / BATCH NO.: P0041594/S134206

MATERIAL CERT REC'D: Yes
QUANTITY RECEIVED: 12x
QUANTITY INSPECTED: 12x
QUANTITY REJECTED: 0

THICKNESS ORDERED: 2.250"
THICKNESS RECEIVED: 2.250"
SHEET SIZE ORDERED: —
SHEET SIZE RECEIVED: —

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	Y	☒	
CORRECT FINISH	☒	N	
CORROSION	Y	☒	
CORRECT GRAIN DIRECTION	☒	N	
CORRECT MATERIAL PER M-DRAWING	☒	N	<u>AMS QQA-250/12</u>
CORRECT THICKNESS	☒	N	
PHOTO REQUIRED	Y	☒	
CORRECT REF # TO LINK CERT	☒	N	<u>MT: 942260</u>
CORRECT MATERIAL IDENTIFICATION	☒	N	
CORRECT M# ON THE MATERIAL	☒	N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y	☒	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	☒	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
TYPE OF MATERIAL SIZE OF TEST SAMPLE HARDNESS / DUROMETER READING	HRC	HRB	DUR A	DUR D	WEBSTER

testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)	
INSPECTED BY: <u>61</u> <u>9-89</u>	SIGNED OFF BY: _____		
DATE: <u>18/12/03</u>	DATE: _____		

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

